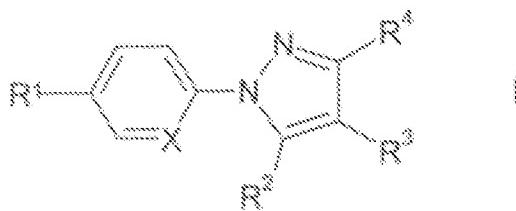


The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A compound of formula I

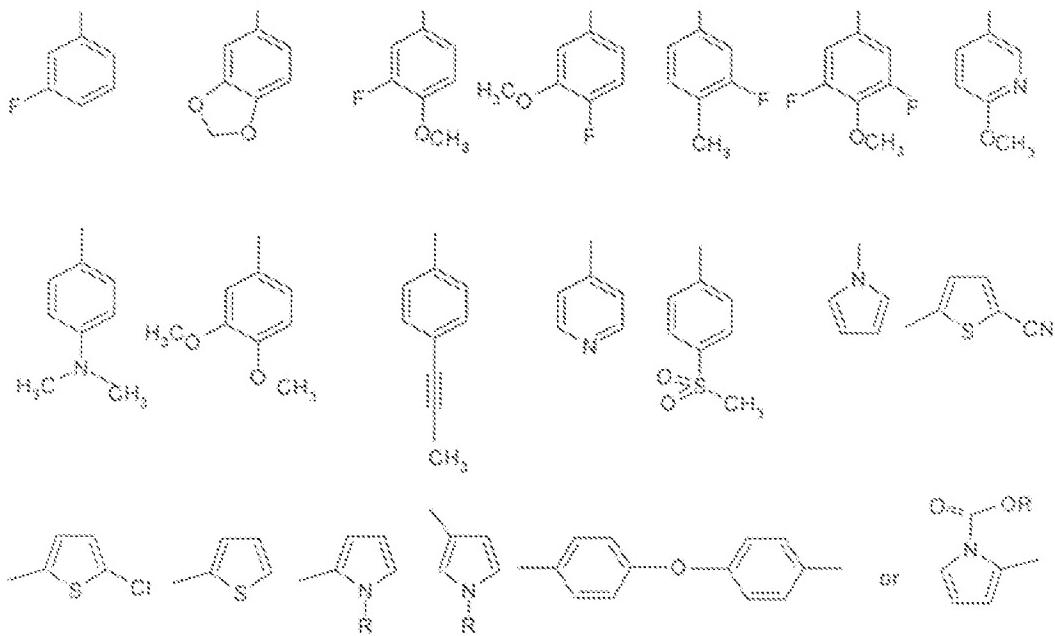


in which

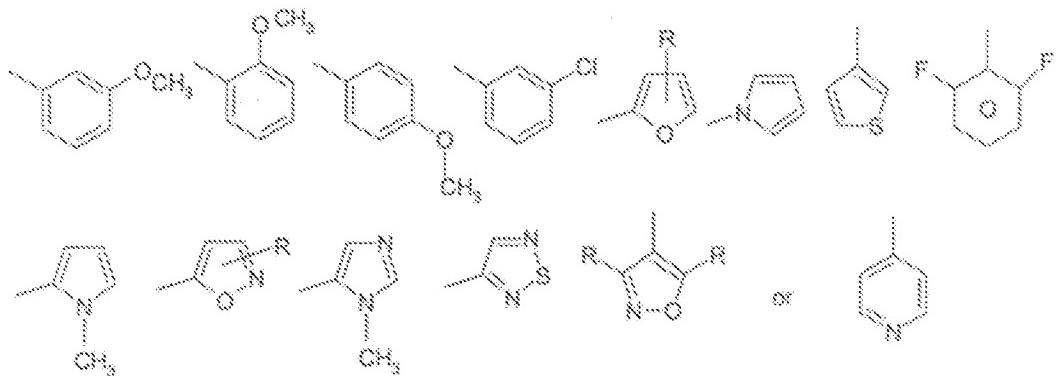
R<sup>1</sup>	denotes (CH<sub>2</sub>)nHet, (CH<sub>2</sub>)nAr, or cycloalkyl having 3 to 7 C atoms,
R<sup>2</sup>	denotes (CH<sub>2</sub>)nHet, (CH<sub>2</sub>)nAr, or cycloalkyl having 3 to 7 C atoms,
R<sup>3</sup>, R<sup>4</sup>	denote H, (CH<sub>2</sub>)nCO<sub>2</sub>R<sup>5</sup>, (CH<sub>2</sub>)nCOHet, CHO, (CH<sub>2</sub>)nOR<sup>5</sup>, (CH<sub>2</sub>)nHet, (CH<sub>2</sub>)nN(R<sup>5</sup>)<sub>2</sub>, CH=N-OA, CH<sub>2</sub>CH=N-OA, (CH<sub>2</sub>)nNHOA, (CH<sub>2</sub>)nN(R<sup>5</sup>)Het, (CH<sub>2</sub>)nCH=N-Het, (CH<sub>2</sub>)nOCOR<sup>5</sup>, (CH<sub>2</sub>)nN(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>OR<sup>5</sup>, (CH<sub>2</sub>)nN(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>OCF<sub>3</sub>, (CH<sub>2</sub>)nN(R<sup>5</sup>)C(R<sup>5</sup>)HCOOR<sup>5</sup>, (CH<sub>2</sub>)nN(R<sup>5</sup>)CH<sub>2</sub>COHet, (CH<sub>2</sub>)nN(R<sup>5</sup>)CH<sub>2</sub>Het, (CH<sub>2</sub>)nN(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>Het, (CH<sub>2</sub>)nN(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>N(R<sup>5</sup>)CH<sub>2</sub>COOR<sup>5</sup>, (CH<sub>2</sub>)nN(R<sup>5</sup>)CH<sub>2</sub>CH<sub>2</sub>N(R<sup>5</sup>)<sub>2</sub>, CH=CHCOOR<sup>5</sup>, CH=CHCH<sub>2</sub>NR<sup>5</sup>Het, CH=CHCH<sub>2</sub>N(R<sup>5</sup>)<sub>2</sub>, CH=CHCH<sub>2</sub>OR<sup>5</sup> or (CH<sub>2</sub>)nN(R<sup>5</sup>)Ar,
	with the proviso that in each case one of the radicals R<sup>3</sup> or R<sup>4</sup> denotes H,
R<sup>5</sup>	denotes H or A,
A	denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,
Het	denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,
Ar	denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR<sup>5</sup>, OOCR<sup>5</sup>, COOR<sup>5</sup>, CON(R<sup>5</sup>)<sub>2</sub>, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCOR<sup>5</sup>, CF<sub>3</sub> or SO<sub>2</sub>CH<sub>3</sub>,
n	denotes 0, 1, 2, 3, 4 or 5,
Hal	denotes F, Cl, Br or I, and

X denotes N, or

in the case where R<sup>1</sup> denotes



in which R denotes H or an alkyl group having 1 to 6 C atoms,  
and/or R<sup>2</sup> denotes



in which R denotes H or an alkyl group having 1 to 6 C atoms,  
alternatively denotes CH,

or an enantiomer, racemate, or a mixture of enantiomers thereof,  
or a pharmaceutically acceptable salt thereof.

2. (Previously Presented) A compound of formula I according to  
Claim 1, in which R<sup>1</sup> denotes phenyl, 2-, 3- or 4-cyanophenyl, 2-, 3- or 4-  
fluorophenyl, 2-, 3- or 4-methyl-, -ethyl-, -n-propyl- or -n-butylphenyl, 2,3-, 2,4-, 2,5-,  
2,6-, 3,4-, 3,5- or 3,6-difluoro-, -dichloro- or -dicyanophenyl, 3,4,5trifluorophenyl,  
3,4,5-trimethoxy- or -triethoxyphenyl, thiophen-2-yl or thiophen-3-yl.

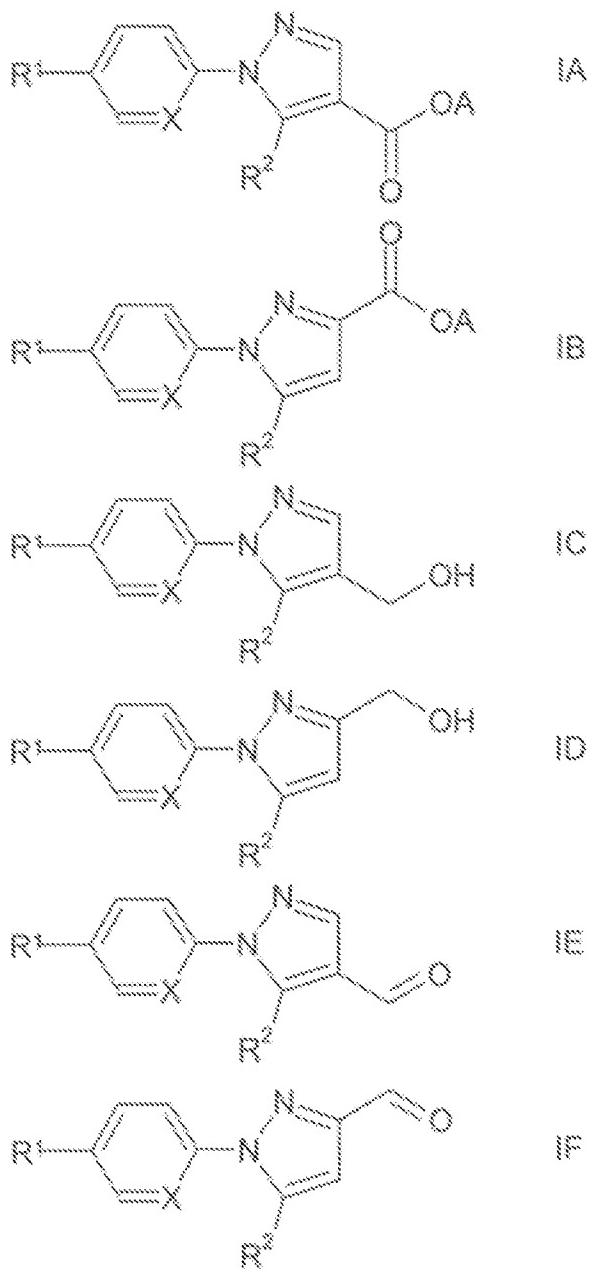
3. (Previously Presented) A compound of formula I according to  
claim 1, in which R<sup>3</sup> denotes H.

4. (Previously Presented) A compound of formula I according to  
claim 1, in which R<sup>4</sup> denotes H.

5. (Previously Presented) A compound of formula I according to  
claim 1, in which R<sup>2</sup> denotes phenyl, 2-, 3- or 4-cyanophenyl, 2-, 3 or 4-  
fluorophenyl, 2-, 3- or 4-methyl-, -ethyl-, -n-propyl- or -n-butylphenyl, 2,3-, 2,4-, 2,5-  
or 2,6-difluoro- or -dicyanophenyl, thiophen-2yl or thiophen-3-yl, 2-, 3- or 4-pyridyl,  
2-, 4- or 5-oxazolyl, 2-, 4- or 5-thiazolyl, quinolinyl, isoquinolinyl, 2- or 4-pyridazyl,  
2-, 4- or 5-pyrimidyl, or 2- or 3-pyrazinyl.

6. (Previously Presented) A compound of formula I according to  
claim 1, in which X denotes N.

7. (Previously Presented) A compound of formula IA, IB, IC, ID, IE  
or IF



in which

- R<sup>1</sup> denotes (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, or cycloalkyl having 3 to 7 C atoms,
- R<sup>2</sup> denotes (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, or cycloalkyl having 3 to 7 C atoms,
- A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,
- Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,
- Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR<sup>5</sup>, OOCR<sup>5</sup>, COOR<sup>5</sup>, CON(R<sup>5</sup>)<sub>2</sub>, CN,

$\text{NO}_2$ ,  $\text{NH}_2$ ,  $\text{NHCOR}^5$ ,  $\text{CF}_3$  or  $\text{SO}_2\text{CH}_3$ ,

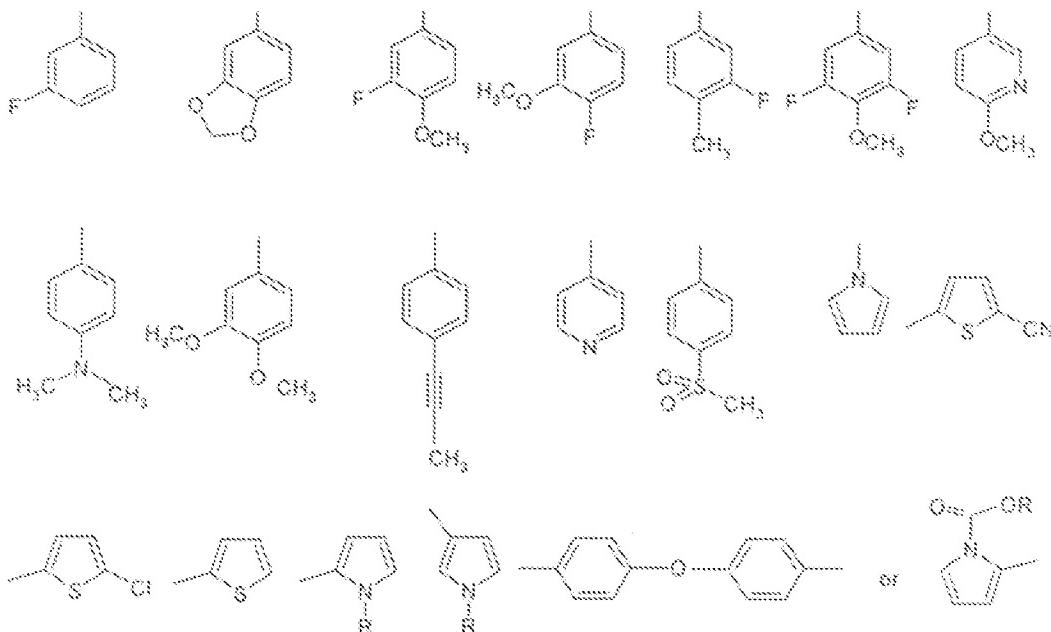
$R^5$  denotes H or A,

n denotes 0, 1, 2, 3, 4 or 5,

Hal denotes F, Cl, Br or I, and

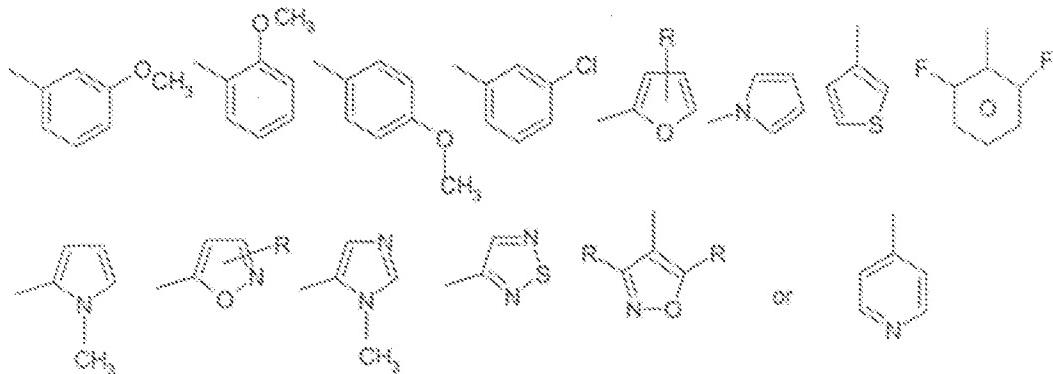
X denotes N, or

in the case where  $R^1$  denotes



in which R denotes H or an alkyl group having 1 to 6 C atoms,

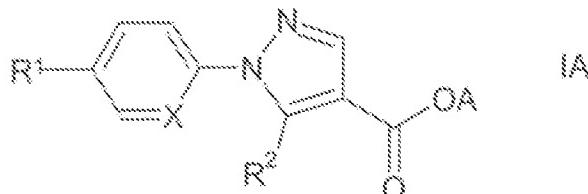
and/or  $R^2$  denotes



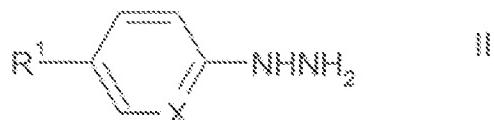
in which R denotes H or an alkyl group having 1 to 6 C atoms,

alternatively denotes CH,  
or a salt thereof.

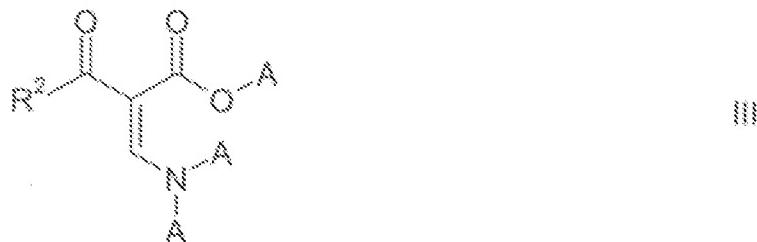
8. (Previously Presented) A process for preparing a compound of formula IA according to claim 7



comprising reacting a compound of formula II

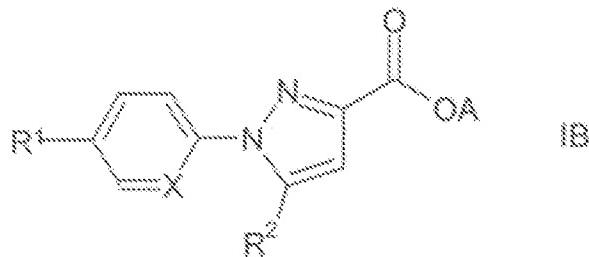


or an acid-addition salt thereof, in which  
R<sup>1</sup> and X have the meanings indicated for the compound of formula IA,  
with a compound of formula III



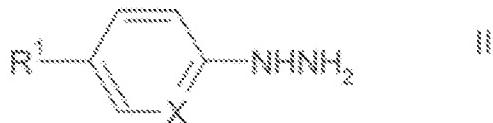
in which  
A and R<sup>2</sup> have the meanings indicated for the compound of formula IA,  
and/or  
a basic compound of formula IA is converted into one of its salts by treatment with an acid.

9. (Previously Presented) A process for preparing a compound of formula IB according to claim 7



in which  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ , X and A have the meanings indicated for the compound of formula IB,

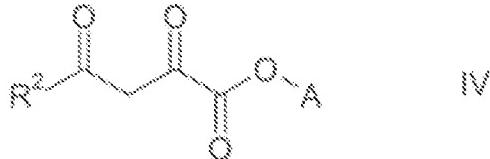
comprising reacting a compound of formula II



or an acid-addition salt thereof, in which

$R^1$  and X have the meanings indicated for the compound of formula IB,

with a compound of formula IV



in which

A and  $R^2$  have the meanings indicated for the compound of formula IB,

and/or

a basic compound of formula IB is converted into one of its salts by treatment with an acid.

10. (Previously Presented) A pharmaceutical composition comprising a compound of formula I according to claim 1 and a pharmaceutically acceptable carrier.

11. (Previously Presented) A method for the treatment of a disease which can be influenced by the binding of a compound of formula I to 5 HT receptors, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.

12. (Previously Presented) A method for antagonizing a 5-HT receptor, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.

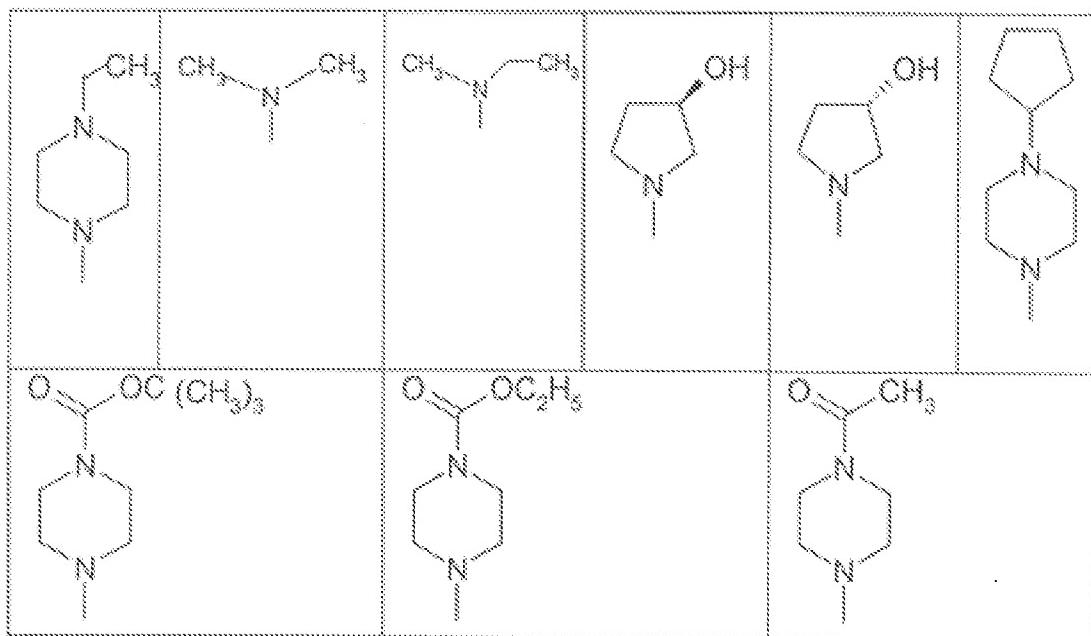
13. (Currently Amended) A method for antagonizing a 5-HT<sub>2A</sub> ~~5-HT2A~~ receptor, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.

14. (Cancelled)

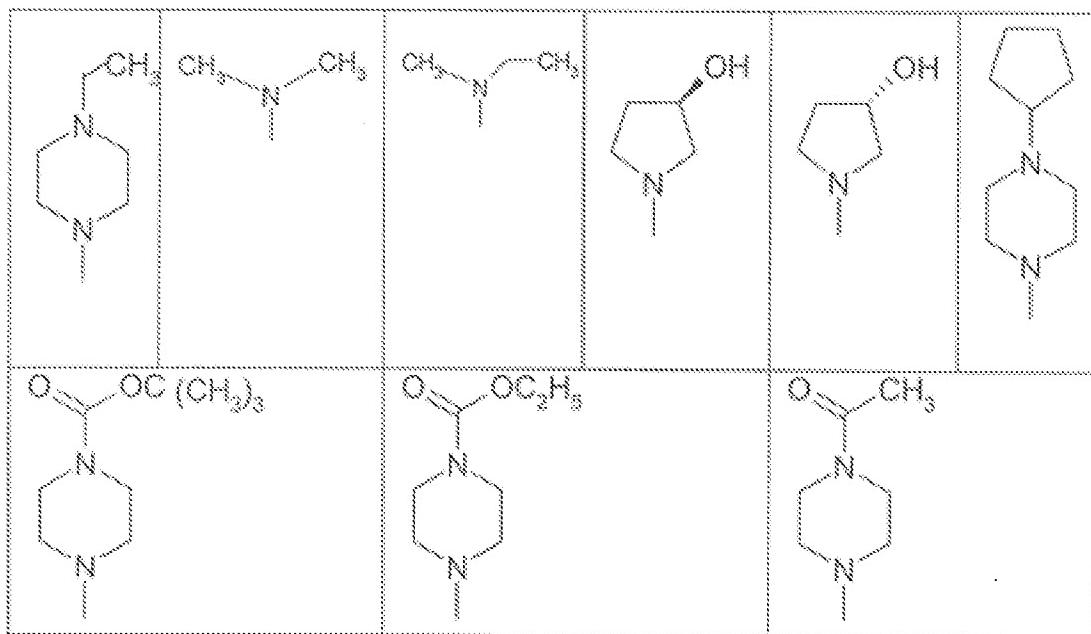
15. (Previously Presented) A process for preparing a pharmaceutical composition according to claim 10, comprising mixing together a compound of formula I and a pharmaceutically acceptable carrier.

16. (Previously Presented) A method for the treatment of psychoses, a neurological disorder, amyotrophic lateral sclerosis, eating disorder, bulimia, anorexia nervosa, premenstrual syndrome and/or for positively influencing obsessive compulsive ~~obsessivecompulsive~~ disorder, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.

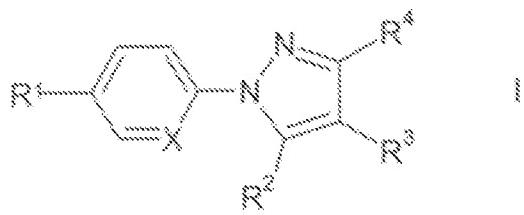
17. (Previously Presented) A compound of claim 1, in which Het is one of the following groups



18. (Previously Presented) A compound of claim 7, in which Het is one of the following groups

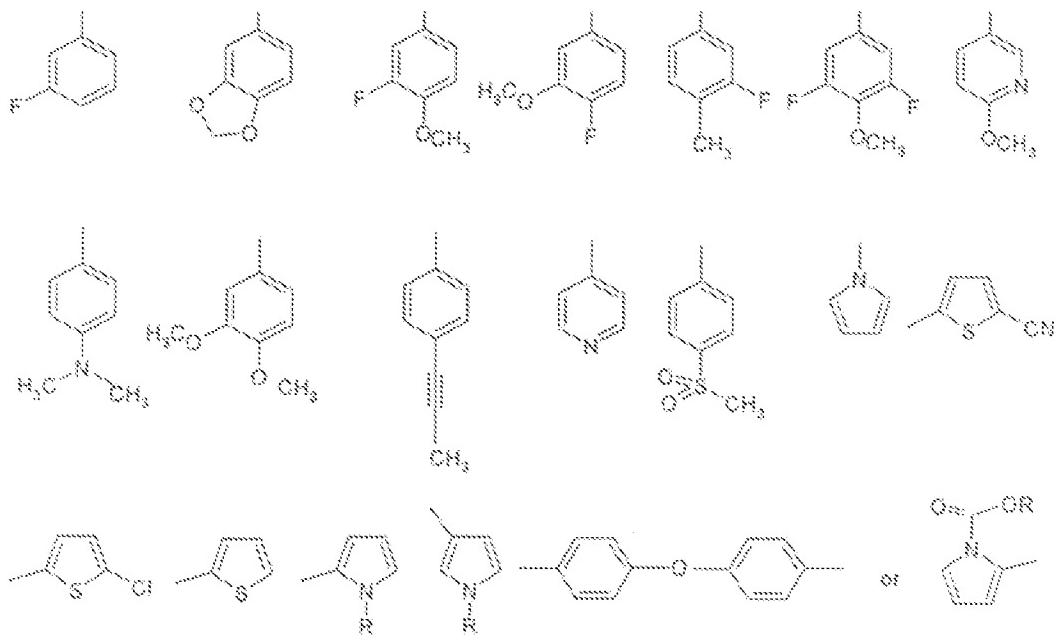


19. (Previously Presented) A compound of formula I according to claim 1

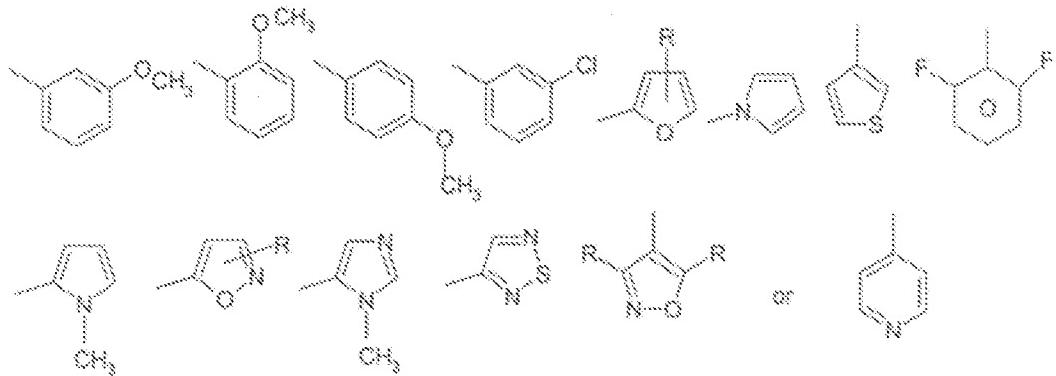


in which

- $R^1$  denotes  $(CH_2)_n Het$ ,  $(CH_2)_n Ar$ , or cycloalkyl having 3 to 7 C atoms,
  - $R^2$  denotes  $(CH_2)_n Het$ ,  $(CH_2)_n Ar$ , or cycloalkyl having 3 to 7 C atoms,
  - $R^3, R^4$  denote H,  $(CH_2)_n CO_2 R^5$ ,  $(CH_2)_n COH Het$ , CHO,  $(CH_2)_n OR^5$ ,  $(CH_2)_n Het$ ,  $(CH_2)_n N(R^5)_2$ ,  $CH=N-OA$ ,  $CH_2 CH=N-OA$ ,  $(CH_2)_n NHOA$ ,  $(CH_2)_n N(R^5)Het$ ,  $(CH_2)_n CH=N-Het$ ,  $(CH_2)_n OCOR^5$ ,  $(CH_2)_n N(R^5)CH_2 CH_2 OR^5$ ,  $(CH_2)_n N(R^5)CH_2 CH_2 OCF_3$ ,  $(CH_2)_n N(R^5)C(R^5)HCOOR^5$ ,  $(CH_2)_n N(R^5)CH_2 COH Het$ ,  $(CH_2)_n N(R^5)CH_2 Het$ ,  $(CH_2)_n N(R^5)CH_2 CH_2 Het$ ,  $(CH_2)_n N(R^5)CH_2 CH_2 N(R^5)CH_2 COOR^5$ ,  $(CH_2)_n N(R^5)CH_2 CH_2 N(R^5)_2$ ,  $CH=CHCOOR^5$ ,  $CH=CHCH_2 NR^5 Het$ ,  $CH=CHCH_2 N(R^5)_2$ ,  $CH=CHCH_2 OR^5$  or  $(CH_2)_n N(R^5)Ar$ , with the proviso that in each case one of the radicals  $R^3$  or  $R^4$  denotes H,
  - $R^5$  denotes H or A,
  - A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,
  - Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,
  - Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal,  $OR^5$ ,  $OOCR^5$ ,  $COOR^5$ ,  $CON(R^5)_2$ , CN,  $NO_2$ ,  $NH_2$ ,  $NHCOR^5$ ,  $CF_3$  or  $SO_2 CH_3$ ,
  - n denotes 0, 1, 2, 3, 4 or 5,
  - Hal denotes F, Cl, Br or I, and
  - X denotes N, or
- in the case where  $R^1$  denotes

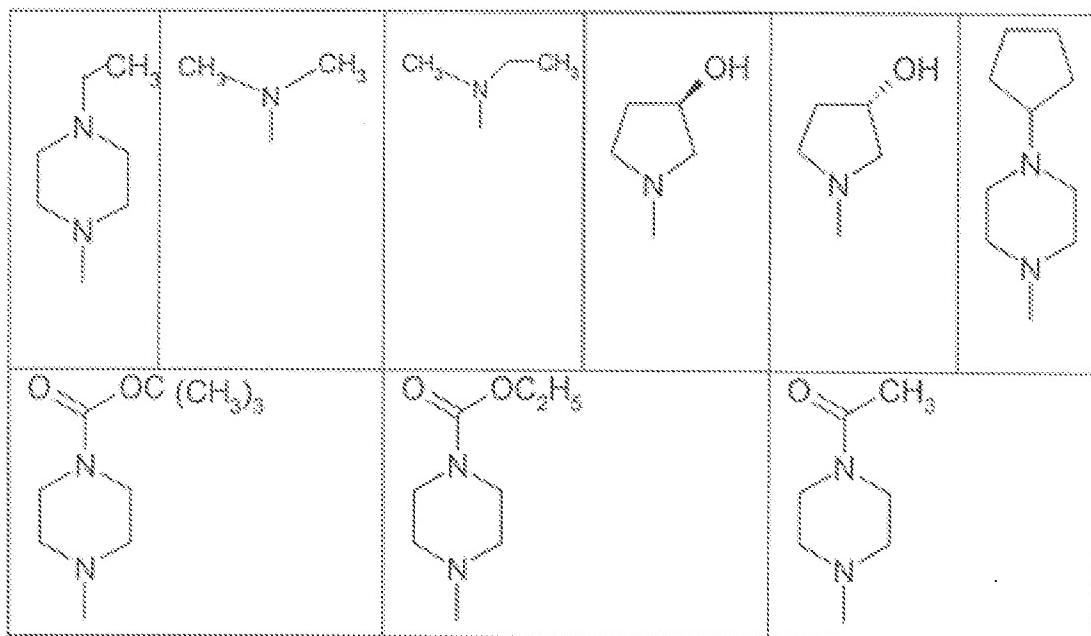


in which R denotes H or an alkyl group having 1 to 6 C atoms,  
and/or R<sup>2</sup>

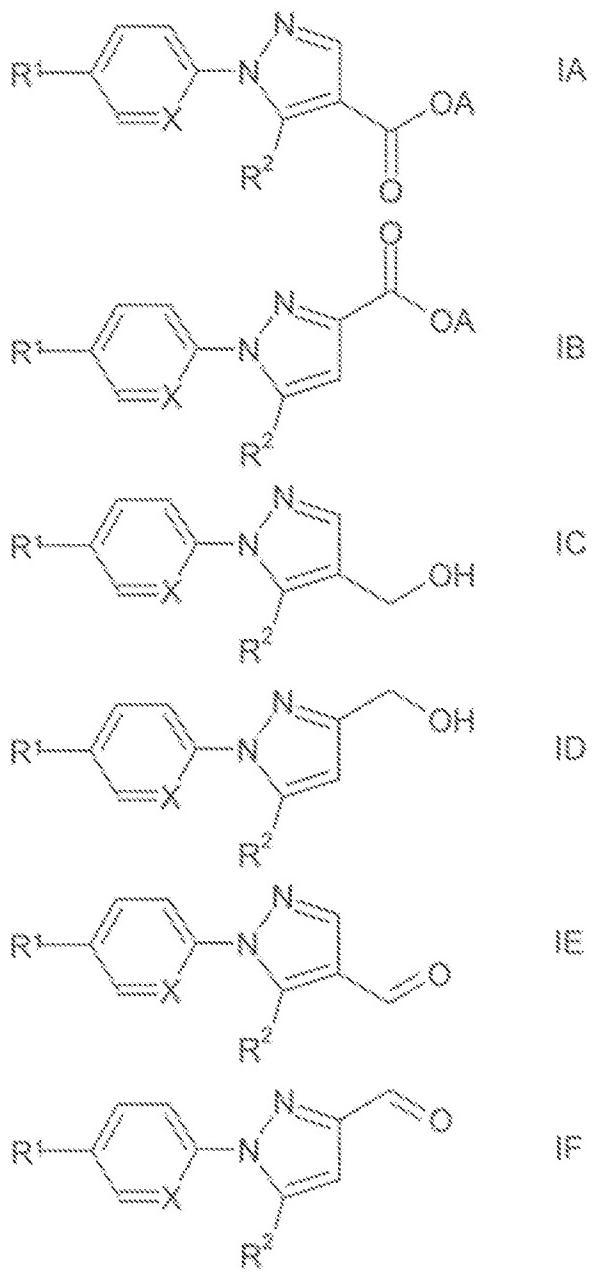


in which R denotes H or an alkyl group having 1 to 6 C atoms,  
alternatively denotes CH,  
or a pharmaceutically acceptable salt thereof.

20. (Previously Presented) A compound of claim 19, in which Het is one of  
the following groups



21. (Previously Presented) A compound of formula IA, IB, IC, ID,  
IE or IF



in which

- R<sup>1</sup> denotes (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, or cycloalkyl having 3 to 7 C atoms,
- R<sup>2</sup> denotes (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, or cycloalkyl having 3 to 7 C atoms,
- A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,
- Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,
- Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR<sup>5</sup>, OOCR<sup>5</sup>, COOR<sup>5</sup>, CON(R<sup>5</sup>)<sub>2</sub>, CN,

$\text{NO}_2$ ,  $\text{NH}_2$ ,  $\text{NHCOR}^5$ ,  $\text{CF}_3$  or  $\text{SO}_2\text{CH}_3$ ,

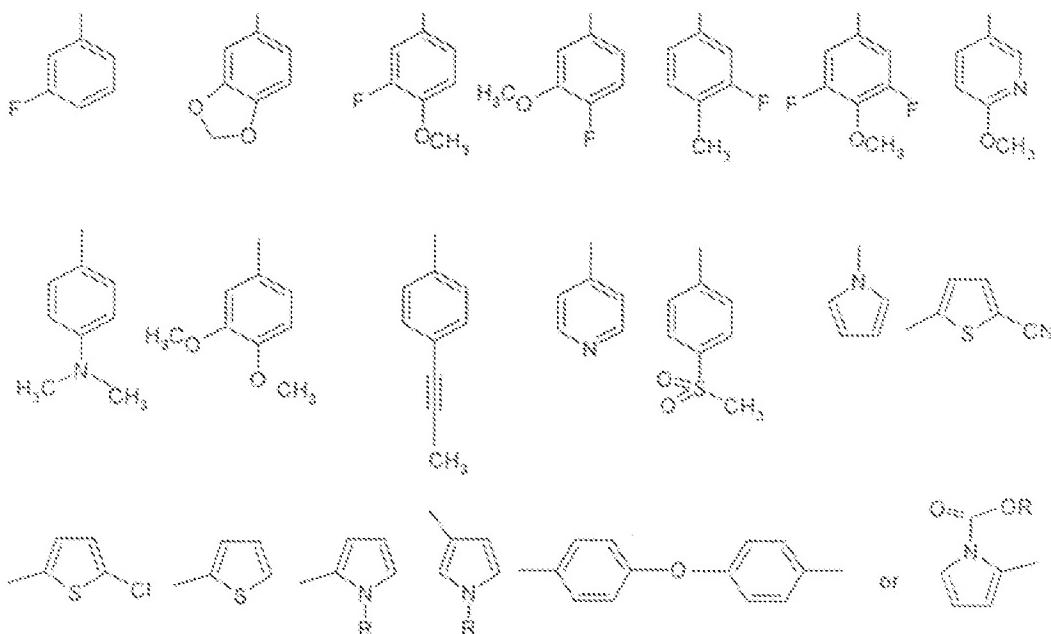
$R^5$  denotes H or A,

n denotes 0, 1, 2, 3, 4 or 5,

Hal denotes F, Cl, Br or I, and

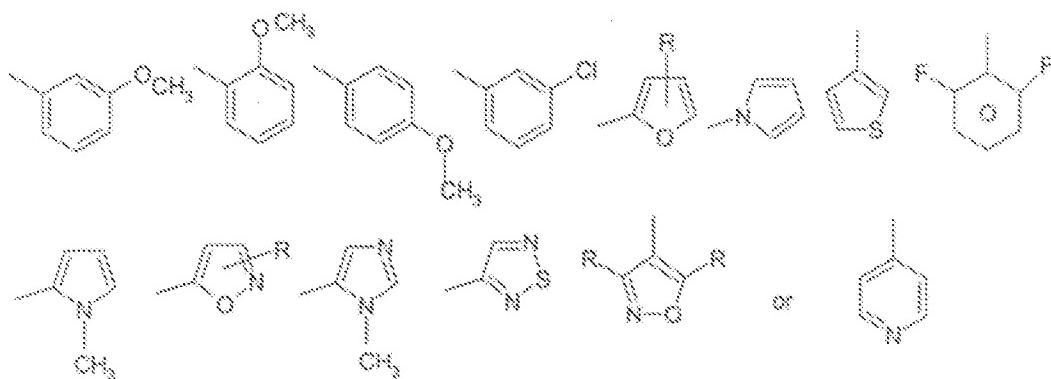
X denotes N, or

in the case where  $R^1$  denotes



in which R denotes H or an alkyl group having 1 to 6 C atoms,

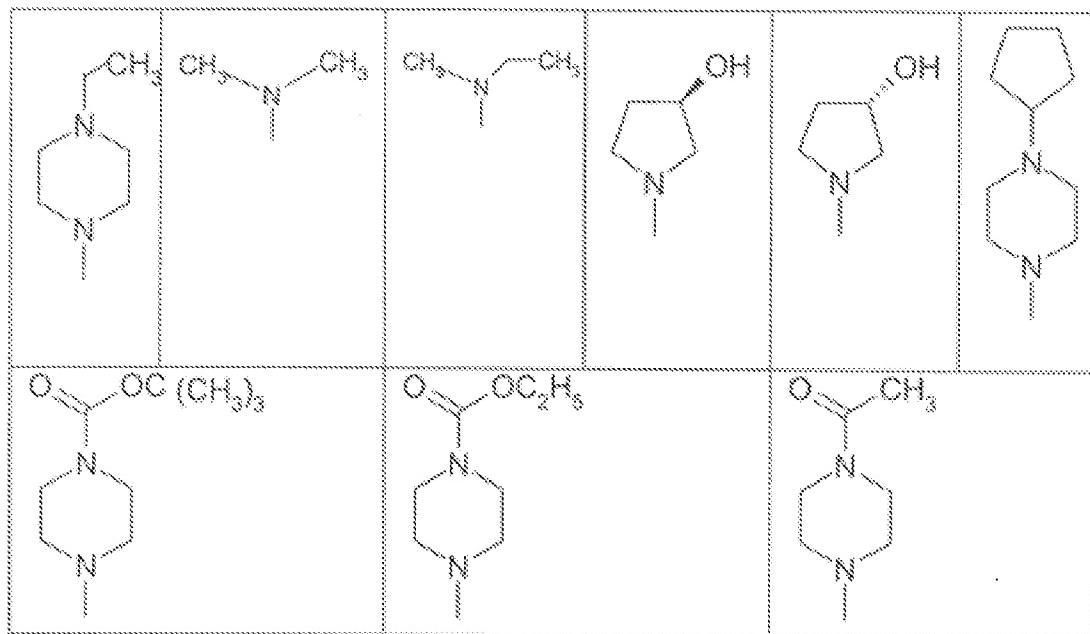
and/or  $R^2$



in which R denotes H or an alkyl group having 1 to 6 C atoms,

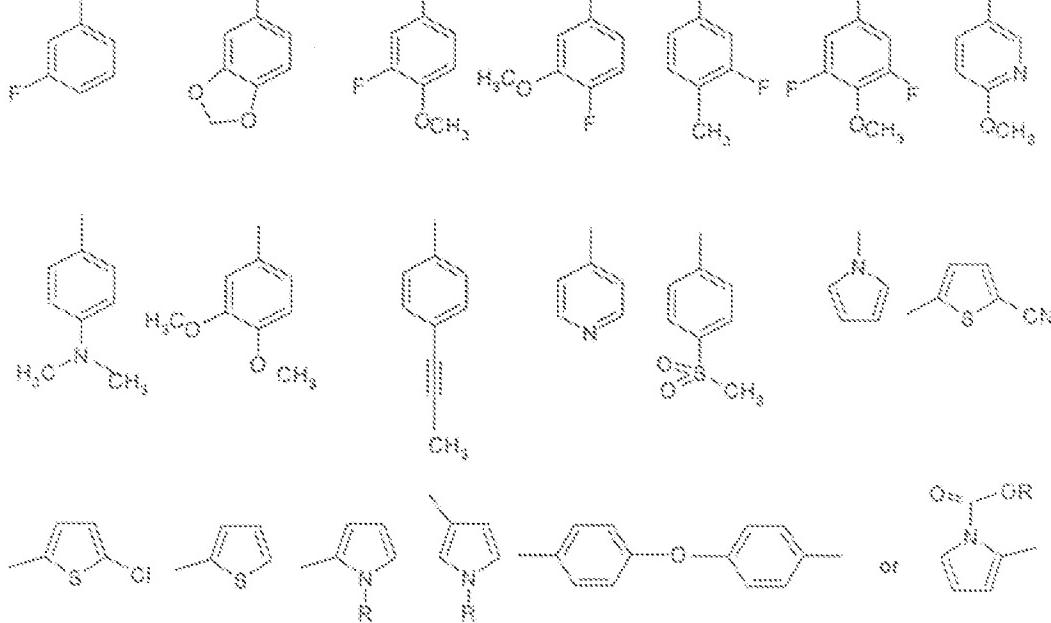
alternatively denotes CH,  
or a pharmaceutically acceptable salt thereof.

22. (Previously Presented) A compound of claim 21, in which Het is one of the following groups

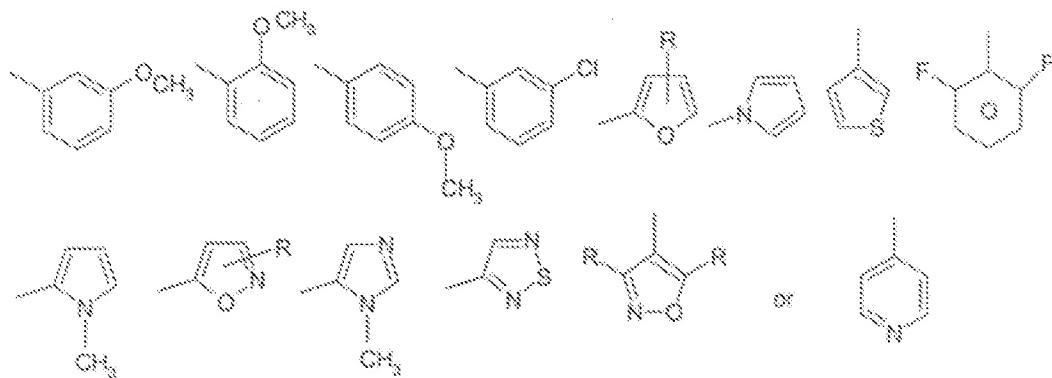


23. (Previously Presented) A compound of claim 1, in which  
 $R^1$  denotes Het or Ar,  
 $R^2$  denotes Het or Ar,  
 $R^3, R^4$  denote H,  $(CH_2)_nCO_2R^5$ ,  $CH=N-OA$ ,  $CH_2CH=N-OA$ ,  $(CH_2)_nNHOA$ ,  $(CH_2)_nN(R^5)Het$ ,  $(CH_2)_nCH=N-Het$ ,  $(CH_2)_nOCOR^5$ ,  $(CH_2)_nN(R^5)CH_2CH_2OR^5$ ,  $(CH_2)_nN(R^5)CH_2CH_2OCF_3$ ,  $(CH_2)_nN(R^5)C(R^5)HCOOR^5$ ,  $(CH_2)_nN(R^5)CH_2COHHet$ ,  $(CH_2)_nN(R^5)CH_2Het$ ,  $(CH_2)_nN(R^5)CH_2CH_2Het$ ,  $(CH_2)_nN(R^5)CH_2CH_2N(R^5)CH_2COOR^5$ ,  $(CH_2)_nN(R^5)CH_2CH_2N(R^5)_2$ ,  $CH=CHCOOR^5$ ,  $CH=CHCH_2NR^5Het$ ,  $CH=CHCH_2N(R^5)_2$ ,  $CH=CHCH_2OR^5$  or  $(CH_2)_nN(R^5)Ar$ , with the proviso that in each case one of the radicals  $R^3$  or  $R^4$  denotes H,  
 $R^5$  denotes H or A,  
A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms,

alkenyl or alkoxyalkyl having 2 to 10 C atoms,  
 Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,  
 Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR<sup>5</sup>, OOCR<sup>5</sup>, COOR<sup>5</sup>, CON(R<sup>5</sup>)<sub>2</sub>, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCOR<sup>5</sup>, CF<sub>3</sub> or SO<sub>2</sub>CH<sub>3</sub>,  
 n denotes 0, 1, 2 or 3,  
 Hal denotes F, Cl, Br or I, and  
 X denotes N, or  
 in the case where R<sup>1</sup> denotes

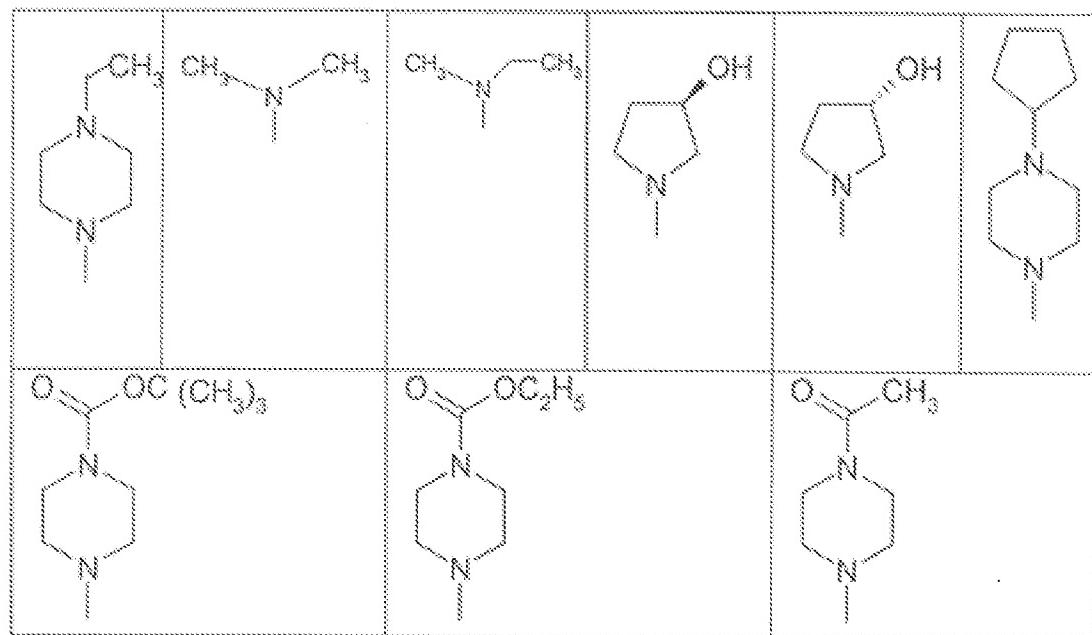


in which R denotes H or an alkyl group having 1 to 6 C atoms,  
 and/or R<sup>2</sup> denotes



in which R denotes H or an alkyl group having 1 to 6 C atoms,  
alternatively denotes CH.

24. (Previously Presented) A compound of claim 21, in which Het is one of the following groups



25. (Cancelled)

26. (Cancelled)

27. (Previously Presented) A method for administering a pharmaceutical composition according to claim 10, comprising providing an effective amount of said pharmaceutical composition to a subject in need thereof.

28. (New) A method for antagonizing a 5-HT<sub>2A</sub> receptor in vitro, comprising administering to said 5-HT<sub>2A</sub> receptor an effective amount of a compound according to claim 1.

29. (New) A method for the treatment of psychoses, amyotrophic lateral sclerosis, bulimia, anorexia nervosa, premenstrual syndrome and/or for positively influencing obsessive compulsive disorder, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.